Adolescence: Normal Psychological Development and Psychiatric Problems

by

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ADOLESCENCE IS A DRAMATIC illustration of the inseparability of the biological influences on the human organism. It is a phase of development initiated by and continually influenced by the pressures on the organism exerted by the qualitative and quantitative changes in biochemical, physiological and particularly hormonal processes. The psychological tasks involved include both working out a pattern of adjustment to these new levels of biological pressure on the organism, and preparing the individual for a new set of responsibilities and tasks. The personality development which eventuates is the end result of the individual's answers to the process of finding answers to both these tasks. The struggles in the process of finding solutions to both these tasks are inevitably intertwined and the end result can best be understood by looking at each individual in terms of how he is dealing with the simultaneous pressures.

In general understanding, adolescence is considered to begin at the age of 12 and to close at the age of 20, roughly coinciding with physiological puberty and the conclusion of the adolescent physical growth spurt. From a psychological standpoint adolescence begins when the person begins to grapple with adolescent psychological problems and closes when he has resolved these problems. Thus psychological adolescence can and often does continue far beyond the age of 20. It is the definition, one focusing on the characteristic problems of adolescence rather than on a particular age, that will be discussed here.

DEVELOPMENTAL CONSIDERATIONS

Adolescence is the penultimate phase in the developmental process, the goal of which is to prepare a child to take its place in the adult world. In the human young, the first stage of this process involves learning how to adjust to life in the family (roughly through 5 years of age). It is followed by a period unique to the human young (6 through 12 years of age), sometimes known as the school age period or the middle age period of childhood. In this period the human young, in contrast to the other mammals, is not yet ready to take its place either physically or mentally in the community with adult responsibility. At the same time, during this period of development, the child is expected to learn how to function with horizons that are enlarged from those of the relatively small family circle to include a larger but still constricted part of the community. Adolescence prepares the individual to take his place in the larger community through balancing-off both the inner biological and physical changes with the new demands of the environment. The old answers, both those learned in the family and in the neighborhood, are brought during adolescence into the larger community and matched with the answers that are expected if the individual is to be able to take his responsible place in the community.

For convenience in discussion of their effects, the biological pressures on the organism demanding a response to maintain homeostasis may be divided into three groups. First are those pressures that relate to self preservation; second are those biological components related to sexual functioning; and third are the aggressive drives. There are considerable individual variations present from birth both quantitatively and qualitatively in the strength of these pressures. The ways in which these pressures are met and adjusted to depend upon the life experience of the child, including the standards of the environment in which it is reared, as well as the model it has in parents, teachers, siblings and the group in which the child belongs. Therefore, the child brings to adolescence an already fairly well defined set of answers about how it has determined what its responses should be to the pressures of these drives. Poor answers or part solutions can complicate the smooth adjustment to the new level of pressures from the inside of the organism and to new responsibilities for the ways in which they must be expressed in relation to the outside. In other words, the individual must achieve mastery and control of the three sets of drives as they involve his relationships, his picture of himself, his goals and his ability to utilize his capacities.

As an example, if the basic pressures for self preservation have not been met earlier, the child comes to adolescence with a primary emphasis on having needs met and remains preoccupied with dependency. This is in contrast to the child who has developed trust in his close relationships.

If there has been over-stimulation or poor control and direction of the sexual drives the child may bring to this developmental stage preoccupations with masturbation, physical contact with others or even the much earlier patterns of expression and satisfaction of the sexual drives, such as looking, touching, displaying one's self or continuing a special interest in one or more areas of the body and their functions. This is in contrast with the child who has successfully directed the energy from the sexual drives into such useful directions as creativeness and learning.

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Similarly, the aggressive drives (which ideally are used in the service of action to see that the other two sets of pressures are satisfied) may have distortions based on the innate amount of aggression with which the child is born. We have the contrast of a child who from the beginning has a small amount of aggressive drive and therefore may lean towards passivity with the one who has more of such drive than is needed to deal with the satisfaction of the other drives, and therefore has a larger amount of aggression with which to experiment. The latter child, particularly if encouraged in open aggressive expression or if he has had his aggressive patterns poorly handled, may bring to adolescence distortions in the ways in which his aggression is expressed. Thus he may display hostility, rivalry, abusiveness, surliness, etc. The child with better answers will have developed more socially acceptable ways of expressing aggression, such as ambition and competition instead of rivalry, helpfulness instead of bullying, constructiveness instead of destructiveness, etc.

The child's answers to the stages of personality development through which it has gone earlier are also brought to adolescence and determine the individual's responses to adolescence. The stages gone through earlier are reenacted as part of the work of psychological development during adolescence. The poor answers as well as the good answers are reviewed and need to be considered if one is to understand the reactions of the adolescent. Thus, in terms of relationships the ease with which comfortable ties and patterns of closeness and belonging is reflected in the way in which the adolescent responds to its review of relationships in the new perspectives. The problems he may have had earlier in working out separation and functioning as an individual are repeated in the process of attempting to find better answers. If the early ones have not been sound, separation problems can be reactivated, for example in the form of school phobia. Negativism is experimented with a pattern of exercising the will as a part of oneself. Fears, particularly as they relate to bodily hurt, are reactivated. The child who brings still unresolved fears of hurt to this new phase of development must experiment with both old and new solutions in this new phase of development if it is to resolve these fears. The problems of close individual as well as group relationships are reenacted in terms of the experiences, sound and unsound, from the earlier phases.

The relationship problems are usually experimented with first and logically at home, often with parents and siblings. Where there is compliance with the teen-ager's wishes, demands or tricks to achieve physical closeness and other forms of intimacy, there may be delays in the necessary process of giving up these ideas about those closest to them. Only when blocked are they really free to reach outside of home to find more appropriate and socially acceptable directions for investment of these wishes.

The problems of cleanliness vs. messiness, the problems of property rights, right and wrong, moral values are all tested, again, to see how they fit into the new horizons and new responsibilities the child faces when it comes to adolescence. The processes by which the individual has learned to obtain satisfaction, whether from the functioning of his mind in learning, the functioning of his body in games or other forms of body expression and in his satisfactions from relationships are reviewed, re-tested, and reworked in the new context of adolescence responsibility intertwined with the answers to the new levels of the biological drives.

The individual's psychological defenses are usually well established by the time he reaches adolescence. These have to do with the ways in which it controls and protects itself from excesses in responding to both the biological pressures and the environmental conditions it must meet. If there is exaggeration or distortion in the use of various forms of defense, this may complicate the reworking process of adolescence or make it more difficult or even impossible. This is particularly true if the defenses operate to create a rigidity in personality and everyday functioning. Some individuals are born with personalities rigidities. This in turn may be added to by patterns of defense against anxiety which in turn provides additional rigidity which can complicate being able to successfully deal with the variety of standards and responsibilities that the youngster meets as he moves from setting to setting, phase to phase of development. The flexibility to maintain or adjust to more than one standard at a time is the ideal personality equipment for healthy adolescent development. Thus, a youngster needs to be free to adjust to one set of langauge patterns with his group, another in school, still another in the playground, and still another at home, etc. The individuals who do not have such flexibility have a more difficult time in adjustment.

When one talks of reworking the phases of development it is no longer in terms of the orderly development seen earlier here, but these phases are worked over episodically and sometimes a number of them may be in evidence simultaneously. One must also consider the cultural and social setting in which an adolescent is reared if one is to understand all the facets of its emotional development. The lower socioeconomic groups where pressures for survival can be more important than cultural values, offer different standards for the adolescent who is reared in this atmosphere.

Crises and Challenges

With these basic considerations in mind let us examine the normal and abnormal patterns which are in evidence over the range of adolescent personality develop-

ment. These patterns may logically be divided in three phases in terms of the tasks to be accomplished: early, middle and late adolescence.

Early adolescence, which for our purposes would include the period of puberty, ranges in onset from 11 to 13 in the girl, and 12 to 14 in the boy. In this period the major tasks faced are in terms of the physiological and physical changes of puberty. Since these are determined to the largest extent by the hormonal and, therefore, sexual changes, the major task in this age period is to adjust to the new pressures imposed on the girl or boy by the added amount of sexual awareness and interest that results from the upsurge in sexual hormone production. Adjusting to this and the physical changes in size, shape and appearance, as well as changes in body function, make the sexual drives the prime considerations during this age period. Although the aggressive and self preservative drives are re-worked as well, the major readjustment of these latter two pressures is carried out during middle adolescence, and will be discussed later.

In terms of expression of the sexual drives, one must keep in mind that the boys and girls have since the beginning of school age remained relatively isolated from each other in homogenous groups. The barriers that have been built up against their involvement with each other are still present during the puberty phases and, therefore, it is quite difficult for them to express the sexual drive as individuals towards the opposite sex. It is as a group, therefore, that they are most comfortable in carrying out these drives. One begins to see the group of girls watching the group of boys playing ball and heckling them. Likewise, the group of boys will begin to congregate where the girls are having games or club meetings. As a group they can go through the phases of sexual exploration. Thus, as the teasing of one group by another progresses, as a group they can work out ways of having physical contact in pushing, shoving, touching, as well as dressing for each other, showing off for each other, etc.

This interaction as a group with the opposite sex is not enough for some youngsters to satisfy the pressures of the sexual drive. Since it is still taboo to reach across group lines, the best answer that many youngsters find for the expression and satisfaction of these drives, is to turn them toward an indivdual of the same sex. Thus, intense friendships begin. A girl may have a crush on another girl in the group. They become inseparable, eating, working, telephoning, playing, walking together and sleeping at each other's houses. Similarly, with boys such twosomes begin to develop within the group, although the boys are not as prone to show physical closeness, such as walking with arms around each other, as are the girls. Occasionally, however, in both groups there are youngsters who have either been overstimulated sexually earlier, have been exposed to poor controls or are highly suggestable. In these even the "buddy" arrangement or the "crush" is not sufficient to deal with the level of the drive and actual sexual exploration may take place, usually in the form of mutual masturbation. When such breakthroughs are discovered there are usually greatly concerned teachers, principals, parents or physicians who ask for help for these youngsters on the basis of their being homosexual. They may be reassured that this does not mean that the youngsters involved are truly homosexual; this is a phase in which it is too dangerous yet for the pubertal child to explore in heterosexual terms. However, if poorly handled or too great fears of sexuality are brought into the picture at this point, it is not impossible for youngsters to remain pegged at this or earlier stages of development. If so they may find it necessary to obtain their major sexual satisfaction later from the "part functions" of normal adult sexual satisfactions, and concentrate on voyeurism, exhibitionism or forms of mutual masturbation, instead of progressing on to heterosexual functioning.

The maturational factors which involve the menarche and the beginnings of seminal ejaculations in the form of "wet dreams" are phenomena about which the early adolescent needs preparation. In recent years, in contrast to the past, it becomes rare indeed to find girls who are not prepared for the menarche. Such instruction has now become part of the school curriculum and sound teaching devices have been developed in many school systems to insure the girls' awareness of the meaning of menstruation and its hygiene. However, not as much emphasis is placed on preparation of the boys. They can be quite puzzled and even frightened by their first seminal ejaculation, particularly if they have only bits and pieces of part information about its meaning, and that from the group. Such information may be especially unreliable when obtained from peers rather than adults.

It may appear surprising on the surface that in spite of quite adequate preparation and a comprehensive intellectual awareness of the "facts of life," with the onset of menarche or ejaculation there should still be reactions in the form of behavior disorders. To understand such reactions we must look back for unresolved problems which have been carried on, often without awareness, to this stage of development. Prominent among them are identity distortions. In other words, the girl who has not wanted to be a girl and has been quite acceptable as a tomboy, must at the point of menarche try to work out a different picture of herself. In contrast, the boy who does not want completely to be a boy, identifying more as a girl, usually is less acceptable in our culture and has received attention before this time. A number

of behavioral manifestations accompany these role changing crises: withdrawal, indifference about the pleasures which had earlier been a focus, loss of interest in school and the group, excessive shyness, increased dependency, irritability, tearfulness, etc. may be manifested.

Role-Changing

The parents of this 15-year-old girl consulted their pediatrician and, ultimately, a psychiatrist because their daughter was "most unhappy, has no friends and is immature." She showed an uncontrollable temper at home, while being very pleasing to others outside the home. She often threw her hairbrush in irritation and cursed at her mother and father over small matters. The patient's mother was so worried that she gave up a lucrative job in order to be home with the patient. Jean is an only child within a stable family. Everything went well until adolescence when all the bickering and unhappiness began.

Jean said, "I lose my temper and get mad at my family." For example, she and her mother bickered over the kind of hairspray that Jean was to buy. The mother wanted her to get one kind, but Jean wanted another that cost exactly the same amount. "Maybe I should have just paid for it myself. It seems that she was mad and she just likes to get me mad." She complained that her mother nagged at her a good deal, but then stated that her parents were much better than others by comparison. "It's just that parents act so superior to their kids. They feel that kids should be seen and not heard; it's as if you are not human." On the other hand Jean's mother complained that Jean corrected her in public in an embarrassing way.

Jean said she wanted to have more independence but then said she didn't want to learn to drive because "every place I want to go, my family will take me, so I really don't need to drive."

This is a bright youngster, struggling with classical adolescent problems about submissions and independence. Her parents were unable to encourage her independence, and the patient was unable to do this on her own. As a result all three became involved in a battle in which each acted in a way that tended to prolong the very conflict they hoped to resolve.

Where unsolved problems about the body have been brought to this stage, especially fears of bodily hurt, not infrequently there is a reactivation of these fears and bodily concerns. Physical symptoms may then become prominent, ranging from fatigue, headaches, abdominal pains, generalized aches, and other psychophysiological manifestations. Even with relatively normal pubertal children there may be periods of such phenomena, as the youngster goes through even mild turmoil in the process of evolving a new picture of himself and better answers to even mild, persistent concerns about body defects and changes.

Usually the most troublesome period is middle adolescence. Having emerged from the phase of learning to adjust to a new sized body and the resulting readjustment to new outlines, plus working out the awkwardness and clumsiness that often results, the middle adolescent begins the testing of how this fits with the changing picture of his place as an individual in the larger community. He begins to shake off the well-organized system run by the responsible adults, as well as the outside "system" which is beginning to make demands on him for responsibility. Any transgressions, which once were encompassed and even hidden in the family are now his responsibility. The limits of his small world are expanded and he is under inner and outer pressure to be independent. It is at this point that one sees the major work done in matching up the old answers with the answers that are expected in the enlarged horizon. Here we see him most visibly (and her of course) alternating between the two sets of answers, the old and the new.

If one is to understand the so often contradictory behavior from the adolescent during this period one must keep in mind this seesaw process that the reworking phenomenon produces. If this phenomenon is looked at from the point of view of the drives and pressures on the organism, they sometimes can be seen more clearly. In relation to the self preservative drives (which often are used so intertwined with the other two that they may be hard to separate out), one may see the youngster going through phases of almost infantile dependency in the demands he makes on the environment and people in it, alternating this with complete independence and fighting off the need to lean on anyone. This is true not only with significant members of the family but also is seen in school adjustment and even in the group to which the youngster belongs. (The group formation in this period has many similarities to the family, in which the "leader" often is the one who will allow or insist that the others be dependent on him.)

Physical concerns as reflections of self-preservative needs may be manifested by periods of considerable concern with things being wrong in physical status. Such concerns are reflected in preoccupation with skin, the hair, the complexion, the height, strength, etc. David Levy evolved a very useful technique for physicians to have an awareness of these concerns so that they can be dealt with. He would say to the youngsters (even handing them a stethoscope), "Now you are the doctor. Examine yourself. What do you find wrong and what

would you like to correct or change?" When such concerns about physical status are intertwined with fears of bodily hurt, the symptoms resulting may be reflected in anxiety based neurotic symptoms. Characteristically these concerns alternate with indifference about appearance, lack of concern about physical needs.

In relation to the pressures for sexual satisfaction, most youngsters are not yet ready in this age period (which roughly ends at about 17 for girls and 18 or older for boys) for direct heterosexual expression of these drives. This does not mean that some middle teen-agers cannot have such an extreme level of heterosexual interest, reinforced by previous sexual experience or seduction that the usual barriers and fears related to bodily hurt and the uncertainties about body integrity as well as the social taboos are not sufficient to prevent overt acted out expression and satisfaction of the sexual pressures.

In most boys and not infrequently in girls, relief from sexual pressures is sought in masturbation in the face of sexual taboos and fears. The patterns in this area reflect the off and on character of this period. Masturbation may be carried out daily or multiple times a day, to be followed by shorter or longer periods of abstinence. Likewise, exhibitionistic tendencies in dress and in activity may alternate with excessive modesty. In mid-adolescence the need to fend off the opposite sex or even to defend against the fantasies of a sexual nature which may be in conflict with their concepts of right and wrong or may stir up too many fears, may result in extremes of avoidance. This warding off may take the form of repulsive obesity in some. Still others may adopt a completely opposite pattern of avoiding any suggestion of sexual interest by making sure that none of the body contours are even remotely suggestive of pregnancy. Sometimes this is accomplished by stopping eating, a not uncommon basis for anorexia nervosa in this age group.

Sexual Problem

As a sidelight to the struggles to keep sexual thoughts and wishes in place, it has become apparent from a number of difficult situations which have resulted that there are dangers in teen-age boys being used as baby-sitters outside their own immediate families. For example, a 15-year-old boy was given babysitting responsibilities with a four-year-old girl which involved toileting, bathing and dressing the child. This adolescent boy who had otherwise well established barriers to sexual acting out was presented with a situation in which the seductive aspects broke down his usual controls. This led to sex play with his young charge. This in turn led to high levels of unmanageable neighborhood and community feelings of outrage and need for punishment.

This not unusual situation indicates that it would be useful to keep adolescent boys from such situations in which their control barriers may not always stand the strain put on them.

The more usual and healthy directions in which the energies from the sexual drives may more safely be invested are in physical and creative activities. Thus, athletics, dancing and imposing sometimes prodigious physical tasks on themselves serves the mid-adolescent important outlets for utilizing this energy in safe directions. Quite useful are the creative directions in which this age group often turn as substitute outlets for the blocked or forbidden direct sexual expression. In some there is a considerable investment of time and energy in intellectual and scientific pursuits, particularly those involving curiosity. Some become preoccupied with literature and poetry and may try their hand at writing. More common forms of writing are the diaries which are started in this age period. Not infrequently they are kept locked but with the key left available so that others may see what goes on. The drive for popularity may also be a direction in which these still taboo direct sexual expressions may be sublimated. The more boyfriends or girlfriends ("scalps") the youngsters with this preoccupation collect, the safer they are from being too involved with any one individual. On the other hand, going steady is another form of protection, particularly if the young twosome can be sure that one or the other will set limits on the amount of "making out."

Characteristically, many youngsters will alternate direct involvement in one degree or another of sexual activity with periods of abstinence, withdrawal, etc., at which time the intellectual directions may predominate. These directions may in turn alternate with truancies, indifference, "trashy" literature, denying themselves what they love best, etc. Similarly, one may see preoccupation with abstinence from many things greatly desired, alternating with splurges in which they may eat three or four banana splits a day, spend all their allowance in an hour, etc., in contrast to previous frugality.

Where the aggressive drives are concerned a similar type of alternation between the old and the new answers may be seen. For example, if negativism had been used in early stages of development as a means of expressing aggressive feelings, the negativism which is experimented with again during this age period may take on the characteristics of considerable argumentativeness. The characteristics of the well known and dreaded adolescent rebellion when closely examined would appear to be a reactivation in some youngsters of the components of earlier negativism. We see early and mid-adolescents saying "no" just for the sake of saying "no," even when they might mean "yes." They are now able to be much more effectively oppositional since they are bigger and smarter and can use these devices much more efficiently

as a means of fighting as well as using them as a means of declaring independence.

One may see in mid-adolescence patterns of pleasure in sadistic or destructive acts. These seem sometimes senseless if one does not keep in mind the reworking of old patterns of aggressive hurting and destroying from early years to find how they fit into the new setting and wider horizons. Such periods (which may be brief or episodic) may alternate with periods of gentleness and extreme kindness. Interpersonal hurtfulness and selfishness may change in the next hour, the next day or the next week with gentleness and giving friends or family the shirt off one's back or anything one owns. Inconsiderate rudeness will shift to periods of great interpersonal sensitivity and empathy.

The more usual and useful directions in which the energy from the aggressive drives are channeled are competition and ambition. This may take the form of athletic or intellectual competing. It may take the form of team effort or it may take the form of rooting for the team, encouraging the team to fight. It may take the form of imposing large work loads on oneself which must be watched so that they do not lead to discouragement about reaching goals of accomplishment.

When the issue of cleanliness vs. messiness has taken on the elements of a battle in a youngster's life experience, it may again be reflected in contradictory mid-adolescent behavior. Thus, many youngsters wear dirty clothes and present an appearance of sloppiness (saddle shoes or sneakers are useless until they are dirty), alternating with periods of preoccupation with new clothes and outward appearance. Similarly, personal rooms which might have been through periods of being clean and neat, suddenly may become messy and disordered. Where being messy had earlier been a way of making people upset, it will be tried out again to see if it still works.

It is not only the pressures from the biological sources which are being reworked and reordered in the life and makeup of the midteenager. He is bringing to this reworking process the character patterns and value systems which were developed earlier. As an example, in terms of property rights, "collecting" in the community is not uncommon. An illustration of this is the somewhat shamefaced minister who came for suggestions about what to do with the garage full of street signs his 15-year-old had collected. Where there might have been preoccupation with obeying traffic rules earlier, once the youngsters start driving themselves there is liable to be at least a period of experimenting with breaking the traffic rules of the community, particularly if their earlier models were less than model observers of these rules.

Delinquency in this age period is an extremely complex phenomenon which may have its roots in the self-preservative drives, the sexual pressures, the aggressive manifestations or the character patterns, as well as in the cultural and social systems of value to which the youngster is exposed. Thus, it is difficult to generalize about delinquency as a mid-adolescent problem. One must look at each individual if one is to understand the basis for his or her anti-social behavior. If, on whatever basis, the child has not been taught to say "no" to himself, he cannot say "no" to himself as an adolescent. Then the community must say "no" to him. If the adolescent cannot hear when the community says "no," one must look at what has happened which makes it difficult or impossible for the individual to hear and to adopt the standards of the community for himself. Some delinquency is rooted in the group, some in cultural values.

In spite of the wide range of tasks to be accomplished in this age period and the variety of inner and outer pressures to which to adjust successfully, the largest percentage of the mid-adolescents negotiate this phase and with relatively little difficulty. By and large these are the youngsters who brought fairly healthy answers to the management of the drives, sound character patterns and identifications with good models which have been available to them. Above all they have the constitutional flexibility and defensive flexibility which allows them to negotiate the expected fluctuation in behavior and demands without becoming anxious or without becoming left at one extreme of behavior or the other as a way of life. This does not mean that they cannot have transient situational adjustment difficulties, such as short periods of school difficulty, periods of hostility, sleeplessness, depression or other obvious indicators of short term emotional turmoil. In addition to this group there is the large group which "matures" during the mid-adolescent period, in the sense of finding better answers to replace those poor ones which they brought from earlier periods of development. The not uncharacteristic picture with such youngsters is a hectic early and mid-adolescent period, ending with a more balanced adjustment.

In those individuals where there is lack of flexibility, either on the basis of constitutional makeup or defensive patterns, such as obsessional and compulsive ways of life and, particularly, if they have poor answers from the earlier phases of development in combination with such rigidity, one may see extreme emotional disturbances. In other words, where the distance between the answers that are expected and the answers to which the youngster is bound from earlier days is too great, and the distance cannot be negotiated, there may easily be feelings of hopelessness and despair, leading to depression and often serious suicidal thoughts (although most adolescents have short bouts with suicidal preoccupation).

Suicide

A 20-year-old boy was referred after making a suicide attempt at a college far from his home. During his second year in college he had difficulty with increasing tiredness and difficulty in studying. Though an adequate student in high school, he had made no plans for his future and went to college merely on recommendation from his parents. He had always been a quiet boy and admired his only sibling, an older sister who was very popular and gregarious. In high school he was a substitute on the baseball team and was glad not to get in games since he was sure he would become nervous and make errors.

Upon getting to college he spent the first week in running around the track alone while others were engaging in social activities. He got a job as a dishwasher to take up his extra time and worked very hard during the year. He became increasingly lonely and was disturbed that other boys "were playing cards and drinking beer when all those people were starving in the world. I didn't think it was right to live in such luxury." He had sought help from the school doctor but reported that, "he told me I had to work harder, and I tried and tried to put everything out of my mind. But then things got so bad that when I looked through the rims of my glasses and everything looked wavy, the world looked better than it did through the lenses." He finally became so despondent that he took thirty aspirin tablets to ease the desperate pain of loneliness. As a result he was returned to his home. He said, "As soon as I left the campus and was on the bus home I felt better."

Here we see an inhibited, passive, isolated youngster. He had difficulty in making the transition from the supportive setting of his family to that of college and the suicide attempt resulted.

They may develop states of confusion which are very similar at first glance to psychotic states, but fortunately are transitory. One must be on the alert, of course, for the actual onset of psychotic manifestations, because this is the period of life in which the largest number of first episodes of mental breakdown occur. These are usually schizophrenic in nature, although the first manifestations of manic depressive psychosis may occur later in adolescence. Usually the first symptoms of these more severe emotional disturbances are related to the basic unsolved problems from earlier in life. For example, with unsolved separation anxiety, the school phobias occurring in the earlier or mid-adolescent period must be carefully scrutinized as possible early indicators of beginning psychosis.

Late adolescence may be thought of as ranging from 17 to 21 years of age, coinciding with the conclusion of the adolescent physical growth process. Ideally, the adolescent psychological problems are resolved during this period, but psychological adolescence can continue far beyond the age of 21. It should be pointed out here that there are special problems in those youngsters who have developmental distortions, i.e., in whom puberty comes earlier than the norm, and in those in whom puberty comes later, sometimes not until one would expect late adolescence to be occurring. In either case the delays in development or premature development pose special problems in that they make these youngsters different from their peers. There are more problems seen in the late maturer than in the early maturer, because even though younger, a youngster's physical and mental maturity at an earlier age will still allow him to be incorporated in an older group. With the delays in physical and emotional maturity special problems arise because the differences can make the youngster stand out or be butt of teasing, uncomfortable comparisons in the gym, etc. Such youngsters need the reassurance from the physician that with everything else being normal, they can expect to achieve maturity and the delay does not mean that they have fundamental pathology.

The tasks of late adolescence are to crystallize a stable identity, to work out an adequate career choice, to have independence from family as necessary, to achieve a mature sexual identity, and to evolve ethical and moral values which have reasonable consonance with society. This may be looked on as the last period in life in which character is greatly malleable and, therefore, is a prime point at which distortions may be corrected before they are crystallized as a way of life and functioning. This need is being recognized increasingly with the availability in schools and colleges of trained counselors and guidance services. Very often the working out of the problems brought to this latest phase of adolescence are not achieved until the individual leaves home, possibly for college, armed services, jobs or even for short periods, such as summer appointment or visiting or travel.

Psychiatric Disorders

Psychiatric problems of adolescence have been formally recognized for only a brief span of time. As in so many other fields, the period since the second world war has seen the development of great interest and considerable accumulation of knowledge about emotional problems of adolescents. Obviously, adolescents had been treated by psychiatrists, pediatricians and counsellors prior to this period and there had been college mental hygiene clinics and other facilities for the care of teen-agers. The much greater visibility of adolescent emotional turmoil as well as the commitment of professional facilities to the study and care of such turmoil has been a recent phenomena. In fact, statistics about teenage delinquency, schools dropouts and behavioral diffi-

culties in adolescents strongly suggest that there has been a real increase in these manifestations of adolescent difficulty. Further, the title of "adolescent" has become concretized in this time and this has tended to further separate and delineate the teen-age period in a psychiatric sense from that of childhood and that of adulthood.

The adolescent must also greatly modify the necessarily repressive, prohibiting views parents have given him about sexuality. In the course of adolescence he must not only repudiate many previously useful ways of understanding the world but from them and his new experiences he must build a characteristic and workable view of what his place and possibilities and wishes are in the world of men. All these necessities are placed on an organism growing at a fast pace, vulnerable to all the imbalances of transition and in a social environment which offers a minimum of useful experience for dealing with such problems. That is, the phenomena of adolescence are themselves quite young and the period of adolescence itself is changing rapidly. Therefore it is exceedingly difficult to set down norms and rules for proper conduct during this time.

In usual or normal adolescence development occurs fitfully and not smoothly. A new situation is encountered abruptly and dealt with precipitously. In the great dichotomies of dependency—independence, sedentariness, migration, challenge—retreat, curiosity—insensitivity, the adolescent functions like an engine with only a single forward gear. This is seen variously in the immediacy and intensity of his romantic attachments, his interest in gadgets or in school activities. These interests usually are as explosive in their finish as they are abrupt in their start. The adult, quite separate from these ways of yet eager adolescence, to be protective of the adolescent and aware of the dangerous consequences of many adolescent acts, often finds himself in direct conflict with the adolescent. Naturally this complicates the situation and even in healthy adolescents, there is a considerable period of turmoil. Such turmoil is always ready to aggravate or even initiate psychophysiological symptoms and many other behavioral symptoms.

Characteristic medical and emotional symptoms of adolescence related to psychological conflict are the following:

1. Turning away from important relationships: There is often resentment, severe disagreement or constant bickering with parents. The result may be depreciation of the parent or running away.

2. School problems: Truancy, indifferent school success and mild delinquency within the school are often seen.

3. Delinquency.

4. Problems of weight and appearance. Acne, obesity, exaggeration in dress and concern about height.

5. Relations with peers: Excessive shyness, inability to become part of the social life of the group. On the other hand one sees exceeding dependence upon social life or participation in sexually promiscuous activities.

6. Psychophysiological symptoms: Fatigue, headache, menstrual difficulties, fainting, weakness. Ulcerative colitis, duodenal ulcer, arthritis.

7. Sexual symptoms: Fears and inhibition in regards to sexuality. Sexual promiscuity, conversion symptoms.

8. Neurotic disorders: These include phobic reactions, depression, anxiety neuroses, conversion neuroses and compulsive and obsessional reactions.

9. Suicide.

10. Psychotic reactions: These are almost totally of a schizophrenic nature. Manic-depressive difficulties do not begin usually until early adulthood.

11. Transient situational personality reactions: Adjustment reactions of adolescence.

These include the short periods of school difficulty, extreme hostility between child and parent, sleeplessness and turbulence or acute turmoil which occur so often in adolescents. Though these states may have ominous implications, more usually they are quickly concluded with minimal support of help.

Summary

As adolescence is the period when the person makes the greatest transition of his life—that from total involvement in his family and a very small environmental circle to that of independence and a much larger involvement in society—it is a time when he is exceedingly malleable and vulnerable. Most of the psychiatric disorders of adolescents are reflections to greater or lesser degree of an imbalance between various internalized, familial or social forces. It is in the understanding of these forces and the correcting of their imbalance that psychiatric help can be of most use to the adolescent. Such help can aid in the relief of psychophysiological symptoms such as headache, fatigue or gastrointestinal symptoms, as well as school problems, behavioral difficulties and delinquent problems. Some disturbances of adolescents such as anorexia nervosa and florid schizophrenic episodes appear to be characteristic of adolescents, while others are little different from symptoms seen in later life. The expected adolescent turmoil necessarily accentuates whatever symptoms do develop. Thus, most symptoms of adolescent emotional difficulty are either initiated by or greatly influ-

enced by the specific tasks, conflicts and pressures of adolescence. It is, therefore, important to understand what these particular pressures are, not only for a general knowledge of adolescents, but, because they can be of specific help in the treatment of adolescents who are in emotional turmoil.

A pre-adolescent child lives within a world bounded by family, school teachers, and a relatively small group of playmates. This world is well organized and run by adults. Few demands for responsible action are made of the child. His worst transgressions can be encompassed, even hidden by a family, and his world has nice limits made by his smallness, his fear of leaving his family for the forbidding outside, and his need to work out problems that are preoccupying him within his family.

With the onset of adolescence a social and biological revolution occurs. A great physiological growth spurt and the onset of mature physiological sexual capacity together with a radically changed group of social demands alter the child enormously. Both the society and parents request more independent, responsible action on the child's part, and he is no longer able to hide from or be spared the responsibility of his actions. He is asked to make decisions in many situations novel to him involving jobs, the ethics of situations in which parents aren't present to say something is right or wrong, sexual responsibility and deciding what is the optimal way to deal with a problem when there are no stated norms or definite sanctions.

While all of this is occurring a radical change of internal psychological structure is occurring in the adolescent. He must change from seeing himself as a protected, dependent child looking to his highly idealized parents for most decisions in his life and, in many ways, overthrow the parents' ways that he had incorporated in himself in order that he may differentiate into the individual he is capable of becoming.

Bibliography

1. Freud, Anna: The Ego and the Mechanisms of Defense. London, Hogarth Press, 1937.
2. Pearson, Gerald H. J.: Adolescence and the Conflict of Generations. New York, W. W. Norton Co., 1958.
3. Stone, L. J. and Church, J.: Childhood and Adolescence. Random House, 1957.
4. Werkman, Sidney L.: The Involvement of Parents in Adolescent Emotional Difficulties, in "Adolescence: Special Cases and Special Problems," R. Steimel (Ed.). Washington, D. C., Catholic University Press, 1963.

Discussion of Dr. Lourie's Paper

Dr. Massler: The choice of having a pychiatrist talk to us was not unintentional, as you can see. The question that confronts this august audience is whether or not periodontology is aware that another variable has been added to the problem.

Not only the tissues, the occlusion, the mechanics and the surgical procedures, but does the patient's cooperation play an important role in periodontal therapy as in orthodontic therapy.

If the child does not cooperate but breaks the ligatures, we don't punish the child, we try to find out why the child doesn't like us. Because that is the only way you are going to get an answer to the problems that face us.

With this orientation, we invite your questions.

Dr. Baer: It has been my experience that the adolescent patients who don't respond to local therapy are the ones that seem to be under tremendous emotional tension. How do psychosomatic factors work?

Dr. Lourie: Well, we are very impressed with the cooperation there is between the mind and the body. This includes tissue response. One very good example of this is the production of urine in the individual who wets the bed.

Large amounts of urine get produced by a kidney. If there is a need to wet the bed, we can get a youngster up every hour and get him to the bathroom to empty his bladder, you get him back and he has wet the bed. Doused it; the kind of tissue changes that take place once there is some pathology that can be kept alive by emotional factors, including tissue changes, as I say, is impressive.

Ulcerative colitis is one such example. There are many. Asthma is still another. Once the pathways are set up for tissue changes to take place in response to some pathological process or some irritant, that pathway can also then be activated by emotional factors.

Dr. Glickman: I was very interested in your comment about the youngsters being concerned about their bodies. Just to give you our experience, we are in a clinical field where cooperation by the patient is imperative. We gather the impression that the youngster takes health for granted as coming to him.

He doesn't want to be burdened by, let's say, taking care of his mouth five minutes a day, twice a day, whereas the person who is older is more or less resigned to the fact that they have to commit themselves to a certain degree to maintain their existence and they are more cooperative.

From what you said, apparently we missed the boat someplace because we do have more difficulty with our young people. Even beyond the adolescent, the young college student that seems to be accumulating up around the northeastern part of the country. They come in with an infection and you start to treat them and tell them what is involved and the percentage of follow through is extremely small.

Dr. Lourie: Well, at least one of the factors that you are dealing with is the attempt to see one's self as normal. To avoid the picture of anything being wrong. When you see this in relation to the dental problems, you can be very sure that it is not just your problem. It is a general problem. There are two usual ways in which people avoid looking at the process of disease. One of them is denial. That is very common. It has not happened. If I don't look at it, it won't bother me. That is one side.

Where you have denial, somebody has to be the reality factor. It has to come, hopefully, before there is too much pain or too much disease so that you have distortion.

The other basis on which one needs to at least have an awareness of how it gets in the way is fear. When there is fear of bodily damage, which is normal in this early period of life, if it is unsolved and carried along, it can complicate life to no end, for not just the individual but anybody who has the responsibility to take care of him, because fear can keep him away. And when it is fear, then he needs help.

This is a very common kind of phenomenon, more common than we like to admit. In other words, no matter how many disease detection programs we set up in a preventive way, the individual who is afraid to let anybody be involved with him physically because of the fear of damage is not going to respond. He is not going to respond to cancer or diabetes or any kind of prophylactic situations. He will stay away until he can no longer disregard the hurt, the pain.

So that the third element that one needs to watch out for is the economic. There is a kind of economic thing we are dealing with in terms of the individual's willingness to do something about himself when there is something wrong. And that is, how much pain can you stand and how much pain can you tolerate. Unfortunately, some individuals can tolerate a tremendous amount and we can't help them by the time they come to us. We have the same problem with any kind of prophylactic situation.

Dr. Morris: I wonder in the cases of periodontosis that you saw, Dr. Baer, whether there was any psychiatric evaluation and whether these children were any different than a similar group?

Dr. Baer: I found two groups. One had a familial history of the disease; the other a nonfamily history. This latter group had tremendous emotional or psychic problems. As an example, one female patient in this group tried to commit suicide. Fortunately it was an unsuccessful attempt. Do you find that, in general, adolescents with mild chronic diseases differ much from adults who have the identical disease?

Dr. Lourie: Well, I would say in general you will probably have a higher incidence of reaction, denial, whatever in adolescents than you have in adults because it depends on which point in the seesaw the youngster is at when you are talking to him. There is a point where denial has a great deal of influence on the individual, but he may give it up before he reaches adult life. So that, in terms of numbers, your chances of running into denial and rejection are higher in adolescents but that doesn't mean you can't reach that same adolescent next week. You can still reach him with reality, maybe. Unfortunately, too many people try to reach these youngsters by using fear, and fear is what they are avoiding. Also don't try to use guilt or make them feel guilty. That doesn't work either because by this time most of them are experts at handling guilt.

Dr. Glickman: Can you take the next step?

If they don't want to cooperate and you are not going to scare them into it or make them feel guilty, is there an approach? Is it purely a dental chair matter or is it something that has to be handled outside of the dental chair?

Dr. Lourie: It depends on the basis for it. You are dealing with individuals. It is hard to generalize. But there are some techniques that have been developed that might be applied to what happens in the dentist's chair. David Levy, who was one of the pioneers in child and adolescent psychiatry, developed an examination technique that might be useful to think about in terms of dental approaches. He says to the patient, a teenager, usually, once the youngster is on the examining table—that is the first step, to get him in that chair. He says, "Here is the stethoscope, here is the mirror; examine yourself. What would you say is wrong?" Then they don't have to be defensive against you, dare you to find out what is wrong or hide from you what is wrong. You are putting the ball up to them, or throwing it to them to do something with.

That might bypass at least some of these more superficial approaches, but I think knowledge of the kinds of things that can go wrong or can interfere, I should say, like denial, like fear, like avoidance of pain or just what we call narcissism, the picture that one has of one's self that one doesn't want to disturb, that one is intact. I think if one can present to the youngsters what it is that gets in the way, before they can deny, before they show you their fears or their great need to preserve face, that can take the wind out of their sails. It might strike a bell or make it a little easier for them to cooperate, or at least make it harder for them to deny.

If you give them some picture that you are on to the tricks that the mind plays, but not as an accusation, because the youngsters are not doing this deliberately.

Dr. Massler: It is a very common problem. One of the problems we have in our diagnostic clinic is the patient who comes to us to verify what a practitioner has said about their teeth. It is not infrequent that they have gone to someone that said, "Unless I treat you, you will lose all of your teeth," and they are terrified by it and they want some support.

I think we could be sensitive to this and not use a scare psychology to win the patient over to our method of therapy, especially when it is threatening such as surgical procedures. The obverse might be mentioned at this time to our middle adolescent girls who use the dentist to fall in love with. We have a lot of problems with the maturing female who keeps coming every single week, long after treatment is concluded.